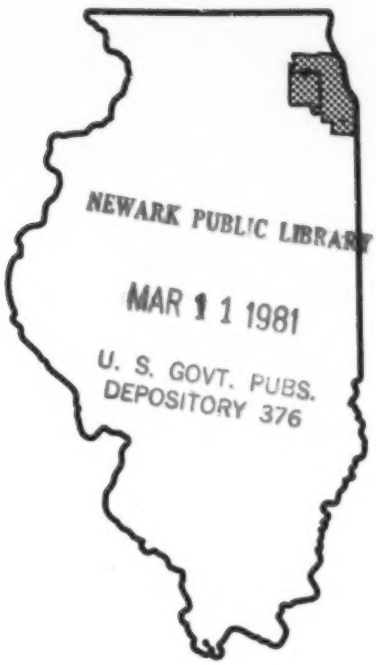
170216

FLOOD INSURANCE STUDY

VILLAGE OF ROSELLE, ILLINOIS

DU PAGE AND COOK COUNTIES



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federal emergency management agency
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PUBLISHED SEPARATELY:

Flood Insurance Rate Map Index
Flood Insurance Rate Map

FLOOD INSURANCE STUDY

VILLAGE OF ROSELLE, DU PAGE AND COOK COUNTIES, ILLINOIS

1.0 INTRODUCTION

1.1 Purpose of Study

This Flood Insurance Study investigates the existence and severity of flood hazards in the Village of Roselle, Du Page and Cook Counties, Illinois, and aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study will be used to convert the Village of Roselle to the regular program of flood insurance by the Federal Insurance Administration (FIA). Local and regional planners will use this study in their efforts to promote sound flood plain management.

In some states or communities, flood plain management criteria or regulations may exist that are more restrictive or comprehensive than those on which these Federally-supported studies are based. These criteria take precedence over the minimum Federal criteria for purposes of regulating development in the flood plain, as set forth in the Code of Federal Regulations at 44 CFR, 60.1 (d). In such cases, however, it shall be understood that the state (or other jurisdictional agency) shall be able to explain these requirements and criteria.

1.2 Authority and Acknowledgements

The source of authority for this Flood Insurance Study is the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973.

The hydrologic and hydraulic analyses for this study were performed by the Illinois State Water Survey for the Federal Insurance Administration, under Contract No. H-4522. Portions of Spring Brook were studied by the U.S. Department of Agriculture, Soil Conservation Service, and the information provided to the Study Contractor. This study was completed in September 1979..

1.3 Coordination

Streams requiring detailed study were identified by representatives from the Study Contractor, the Illinois Division of Water Resources, the FIA, and the Village of Roselle on July 19, 1977. Contacts were made at various levels of government and private industry for the purpose of procuring basic data for the study. These included the U.S. Department of Agriculture, Soil Conservation Service (SCS); Weston Environmental Consultants-Designers;

the U.S. Army Corps of Engineers (COE), Chicago District; and the Illinois Division of Water Resources. In addition, official notice of intent to perform a detailed flood elevation study appeared in The Roselle Star on March 14, 21, and 28, 1979.

On June 30, 1980, the results of the work by the Study Contractor were reviewed and accepted at a final coordination meeting attended by representatives of the Village of Roselle, the Illinois State Water Survey, and the FIA.

2.0 AREA STUDIED

2.1 Scope of Study

This Flood Insurance Study covers the incorporated area of the Village of Roselle. The area of study is shown on the Vicinity Map (Figure 1).

The areas studied by detailed methods were selected with priority given to all known flood hazard areas, and areas of projected development or proposed construction through July 1982.

Approximate methods of analysis were used to study those areas having a low development potential or minimal flood hazards. The scope and methods of study were proposed to and agreed upon by the FIA and the Village of Roselle.

Unincorporated areas are not included in the analysis. Overbank flooding from Spring Brook, from Central Avenue downstream to the south village limits, was studied by detailed methods. Flooding from West Branch Meacham Creek, Spring Brook, Turner Avenue Tributary, Bloomingdale Grove Tributary, and West Branch Tributary, within the corporate limits, was studied by approximate methods.

2.2 Community Description

The Village of Roselle is located in the northeastern portion of Illinois, in the northern part of Du Page County with extensions into Cook County. The total land area within the corporate limits is about 3.8 square miles, or 2,425 acres. It is situated approximately 25 miles west-northwest of Chicago, bordered on the north by the Village of Schaumburg, the Village of Elk Grove Village, and the unincorporated areas of Cook County, on the south by the Village of Bloomingdale, and on the east, west, and south by the unincorporated areas of Du Page County. According to a 1976 State of Illinois Census, the population is 10,213 (Reference 1).

The area is characterized by hot, humid summers and cold winters. Summer and winter temperatures average from 54 degrees Fahrenheit (F.) to 77 degrees F. and from 26 degrees F. to 50 degrees F., respectively. Annual rainfall is approximately 34 inches and is distributed fairly uniformly throughout the year (Reference 2).

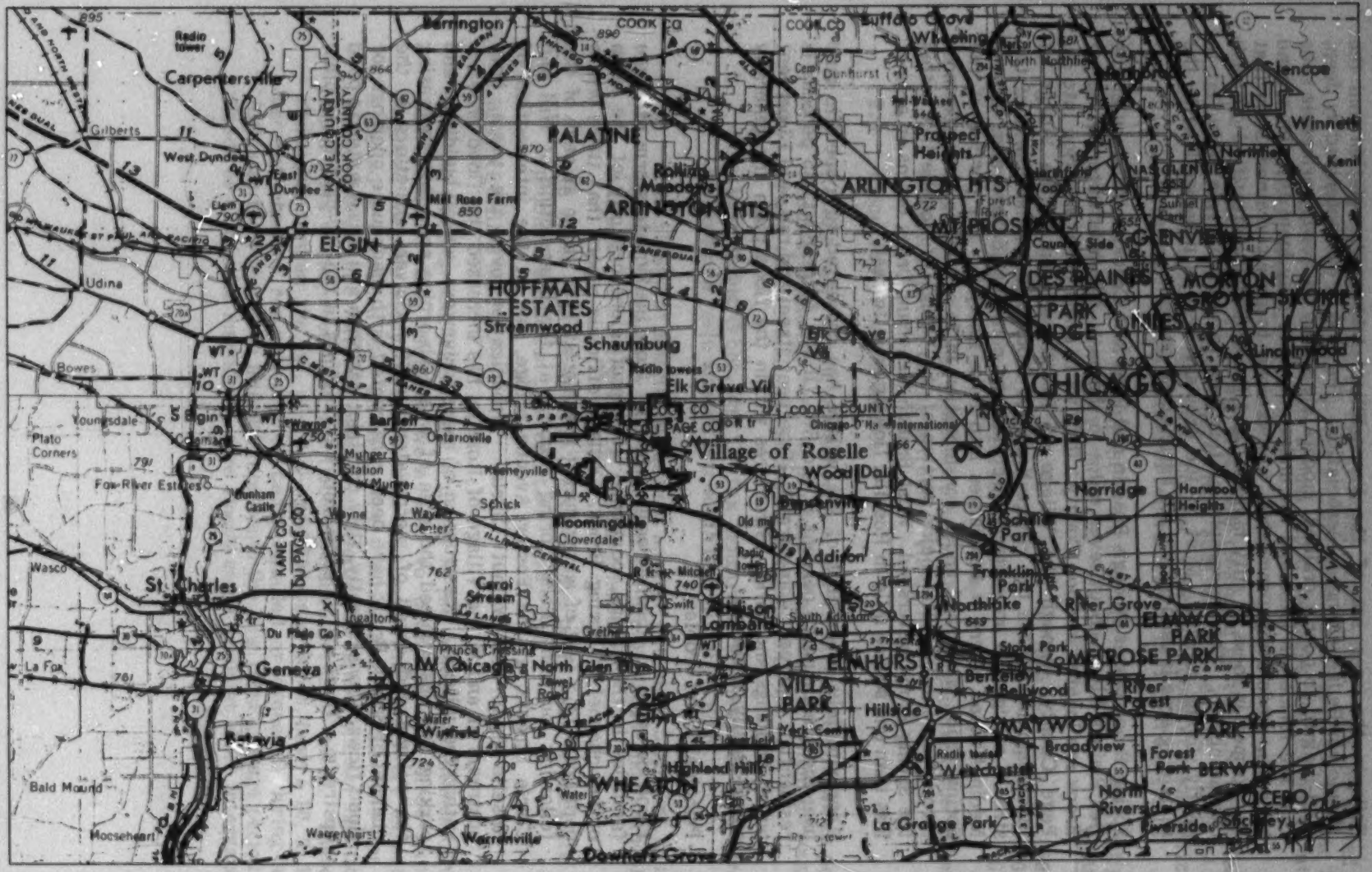

FIGURE 1

FEDERAL EMERGENCY MANAGEMENT AGENCY
Federal Insurance Administration

VILLAGE OF ROSELLE, IL
(DU PAGE AND COOK COS.)

APPROXIMATE SCALE
4 0 4 8 12 MILES

VICINITY MAP

Soils in the area are of the Varna-Elliott-Ashkum Association and the Mundelein-Pella-Barrington Association. The first is characterized by deep, well-drained to poorly drained, moderately slowly to slowly permeable soils that are formed in loess and the underlying silty clay loam till; the second by deep, moderately permeable, well-drained to poorly drained, soils that are formed in loess or silty material and the underlying stratified outwash (Reference 3). The topography of this area ranges from relatively flat to gently sloping terrain. Most of the drainage area is urbanized while the remaining area is used mainly for agricultural purposes.

Spring Brook passes through Roselle and joins Salt Creek, a tributary of the Des Plaines River, about seven miles to the east. The headwaters of Spring Brook are located in Cook County. It flows in a southerly direction into Du Page County, through the Village of Roselle and on to the Village of Bloomingdale. Within the village limits of Bloomingdale, the course of the stream changes to an easterly direction and continues downstream to near Medinah Road where it discharges into Lake Kadijah. The portion of the Spring Brook watershed under consideration in this study is the uppermost three square miles. The major portion of the Village of Roselle lies within the Spring Brook watershed. West Branch Meacham Creek drains an area of less than one square mile in Roselle, flowing west to east.

Approximately 80 percent of the village has converted to a specific land use; the remaining 20 percent is vacant. Of the 80 percent, 45 percent is residential, 5 percent commercial, 17 percent street and rail, and 13 percent public buildings and parks. Structures within the flood plain are generally single-family dwellings.

2.3 Principal Flood Problems

Flood damages in Roselle result primarily from inadequate storm drainage facilities in the village, combined with insufficient capacity of the main outlet channel of Spring Brook. Village officials report that there was a depth of 4 to 5 feet of water during the August 1972 storm at each of the following locations along Spring Brook: at the intersection of Hill and Claria Streets, at the Foster Avenue bridge, and at the intersection of Roselle Road and Walnut Circle. Urbanization over the years, both upstream of and in the Village of Roselle, has increased the flood problem within the village. Construction of roads, driveways, walks, buildings, and parking lots has reduced the area of water-absorbing soil, thus increasing the volume and speed of stormwater runoff. Culvert structures in the channel of Spring Brook have been constructed with inadequate openings for flood flows. Consequently, they constrict drainage and cause water to pond upstream. There are an estimated 62 buildings in the 10-year flood plain

and 173 buildings in the 100-year flood plain. The estimated damages associated with the 10-year and 100-year floods are $388,400 and $633,900, respectively. Average annual flood damages are estimated at $77,300 (Reference 4).

Flood stages on Spring Brook are measured by the U.S. Geological Survey (USGS) crest stage gage No. 5531080 located at Circle Avenue in Bloomingdale. The three highest recorded floods are summarized below (Reference 5). The period of record is from 1961 to the present.

DATE	WATER-SURFACE ELEVATION (ft)	DISCHARGES (cfs)	FREQUENCY (years)
8-26-72	714.10	645	50
1-27-74	710.25	263	10
4-18-75	710.16	256	10

Meacham Creek has minimal flood problems. These exist due to insufficient channel capacity during extreme events.

2.4 Flood Protection Measures

Roselle has a zoning ordinance, No. 413-73 (Reference 6), which pertains to floodwater management. It provides for stormwater detention requirements in new commercial and residential developments.

Along Spring Brook, the Centex Industrial Park provides 39.8 acre-feet of storage in a basin located just south of Irving Park Road.

The Village of Roselle is planning another detention basin just south of the Chicago, Milwaukee, St. Paul, and Pacific Railroad and north of Central Avenue. No construction on this basin has begun.

No other flood protection measures have been taken to alleviate the flood problems studied in this report.

3.0 ENGINEERING METHODS

For the flooding sources studied in detail in the community, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude which are expected to be equalled or exceeded once on the average during any 10-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for flood plain management and for flood insurance premium rates. These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10, 2, 1, and 0.2 percent chance, respectively, of being equalled or exceeded during any year. Although the recurrence interval represents the long term average period between floods of a specific magnitude, rare floods could occur at short intervals or even

within the same year. The risk of experiencing a rare flood increases when periods greater than one year are considered. For example, the risk of having a flood which equals or exceeds the 100-year flood (one percent chance of annual occurrence) in any 50-year period is about 40 percent (four in ten), and for any 90-year period, the risk increases to about 60 percent (six in ten). The analyses reported here reflect flooding potentials based on conditions existing in the community at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish the peak discharge-frequency relationships for floods of the selected recurrence intervals for the flooding source studied in detail affecting the community.

Peak flows for the 10-, 50-, 100-, and 500-year floods on Spring Brook were computed using the SCS TR-20, Computer Program for Project Formulation: Hydrology (Reference 7) and data supplied by the SCS. Parameters for this program include drainage area, time of concentration, and soils. These flows were computed for present development conditions.

The discharges used in this study were determined by the SCS and the Illinois State Water Survey and approved by the Illinois Division of Water Resources. Discharge data for the approximate flooding were determined through use of the SCS TR-20 Program (Reference 7).

Peak discharges for the 10-, 50-, 100-, and 500-year floods of the flooding source studied in detail in the community are shown in Table 1.

TABLE 1 - SUMMARY OF DISCHARGES

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (SQ MILES)	PEAK DISCHARGE (CFS) 10-YEAR	50-YEAR	100-YEAR	500-YEAR
SPRING BROOK					
At Foster Avenue	2.59	197	296	340	446
At Roselle Road	1.70	139	210	240	315

3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of the streams in the community were carried out to provide estimates of the elevations of the floods of the selected recurrence intervals along the flooding source studied in detail.

Cross section data for the backwater analyses of Spring Brook were obtained by field surveys during April-May 1979. At that time, the Study Contractor conducting the field work also obtained elevation data and structural geometry for the bridges on the creek. Cross section data for portions of Spring Brook were also provided by the SCS.

Locations of selected cross sections used in the hydraulic analyses are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway was computed (Section 4.2), selected cross section locations are also shown on the Flood Boundary and Floodway Map (Exhibit 2).

Channel roughness factors (Manning's "n"), used in the hydraulic computations, were selected by engineering judgment and from field observations of the stream and flood plain areas. The factors were chosen to be consistent with commonly reported values. Channel and overbank values for Spring Brook are from 0.045 to 0.055 and from 0.06 to 0.11, respectively.

Starting water-surface elevations on Spring Brook for all designated recurrence intervals were determined from downstream profiles of Spring Brook in the Bloomingdale, Illinois Flood Insurance Study (Reference 8). Water-surface elevation on Spring Brook for the 10-, 50-, 100-, and 500-year floods were computed by the Study Contractor with the SCS WSP-2 step-backwater program (Reference 7); the necessary input information was supplied by the SCS and the field survey by the Study Contractor. Flood profiles were drawn showing computed water-surface elevations to an accuracy of 0.5 foot for floods of the selected recurrence intervals (Exhibit 1).

For streams studied by approximate methods, the elevations of the 100-year flood were calculated using the SCS WSP-2 step-backwater program (Reference 9).

The hydraulic analyses for this study are based only on the effects of unobstructed flow. The flood elevations as shown on the profiles are, therefore, considered valid only if hydraulic structures, in general, remain unobstructed and if channel and overbank conditions remain essentially the same as ascertained during this study.

All elevations are referenced from National Geodetic Vertical Datum of 1929 (NGVD); elevation reference marks used in the study are shown on the maps.

4.0 FLOOD PLAIN MANAGEMENT APPLICATIONS

The National Flood Insurance Program encourages state and local governments to adopt sound flood plain management programs. Therefore, each Flood Insurance Study includes a flood boundary map designed to assist communities in developing sound flood plain management measures.

4.1 Flood Boundaries

In order to provide a national standard without regional discrimination, the 100-year flood has been adopted by the FIA as the base flood for purposes of flood plain management measures. The 500-year flood is employed to

indicate additional areas of flood risk in the community. For each stream studied in detail, the boundaries of the 100-year and the 500-year floods have been delineated using the elevations determined at each cross section; between cross sections the boundaries were interpolated using aerial photo maps at a scale of 1:4800, with a contour interval of two feet (Reference 10) and a scale of 1:1200, with a contour interval of two feet (Reference 11). The flooding from Bloomingdale Grove Tributary and Turner Avenue Tributary was found not to be a flood hazard and no boundaries will be shown for these streams.

The 100-year approximate boundaries were delineated using the above referenced maps.

The boundaries of the 100- and 500-year floods are shown on the Flood Boundary and Floodway Map (Exhibit 2). Small areas within the flood boundaries may lie above the flood elevations and, therefore, not be subject to flooding; owing to lack of detailed topographical information or to limitations of the map scale, such areas are not shown. In cases where the 100-year and the 500-year flood boundaries are close together, only the 100-year boundary has been shown.

4.2 Floodways

Encroachment on flood plains, such as artificial fill, reduces the flood-carrying capacity, increases the flood heights of streams, and increases flood hazards in areas beyond the encroachment itself. One aspect of flood plain management involves balancing the economic gain from flood plain development against the resulting increase in flood hazard. For purposes of the National Flood Insurance Program, the concept of a floodway is used as a tool to assist local communities in this aspect of flood plain management. Under this concept, the area of the 100-year flood is divided into a floodway and a floodway fringe. The floodway is the channel of a stream plus any adjacent flood plain areas that must be kept free of encroachment in order that the 100-year flood may be carried without substantial increases in flood heights. Minimum standards of the FIA limit such increases in flood heights to 1.0 foot, provided that hazardous velocities are not produced. In Illinois, though, under Revised Statutes, Section 65f, Chapter 19 as amended 1973 (Reference 12), encroachment in the flood plain is limited to that which will cause only an insignificant increase in flood heights. Thus, at the recommendation of the Illinois Division of Water Resources, a floodway having no more than a 0.1-foot surcharge has been delineated for this study.

The floodways presented in this study were computed on the basis of equal conveyance reduction from each side of the flood plain. The results of these

computations were tabulated at selected cross sections for each stream segment for which a floodway was computed (Table 2).

As shown on the Flood Boundary and Floodway Map (Exhibit 2), the floodway boundaries were determined at cross sections; between cross sections, the boundaries were interpolated. In cases where the boundaries of the floodway and the 100-year flood are either close together or collinear, only the floodway boundary has been shown.

The area between the floodway and the boundary of the 100-year flood is termed the floodway fringe. The floodway fringe thus encompasses the portion of the flood plain that could be completely obstructed without increasing the water-surface elevation of the 100-year flood more than 0.1 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to flood plain development are shown in Figure 2.

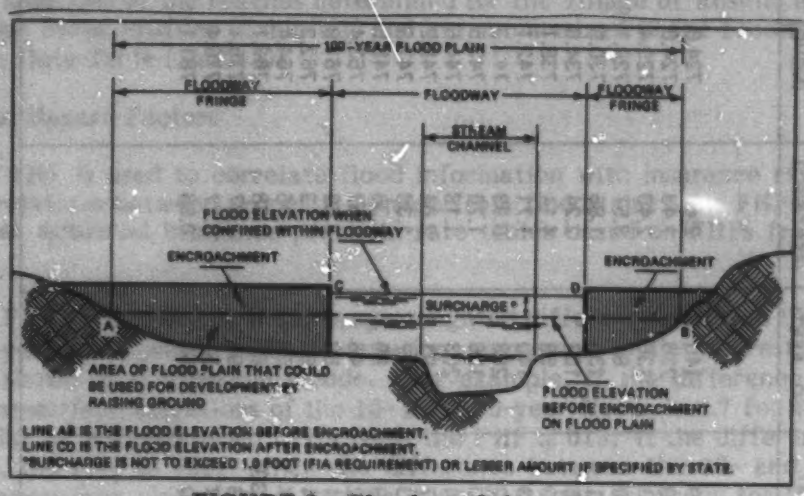
100-YEAR FLOOD PLAIN
FLOODWAY FRINGE
FLOODWAY
FLOODWAY FRINGE
STREAM CHANNEL
FLOOD ELEVATION WHEN CONFINED WITHIN FLOODWAY
ENCROACHMENT
ENCROACHMENT
C
D
SURCHARGE*
A
B
AREA OF FLOOD PLAIN THAT COULD BE USED FOR DEVELOPMENT BY RAISING GROUND
FLOOD ELEVATION BEFORE ENCROACHMENT ON FLOOD PLAIN
LINE AB IS THE FLOOD ELEVATION BEFORE ENCROACHMENT.
LINE CD IS THE FLOOD ELEVATION AFTER ENCROACHMENT.
*SURCHARGE IS NOT TO EXCEED 1.0 FOOT (FIA REQUIREMENT) OR LESSER AMOUNT IF SPECIFIED BY STATE.

FIGURE 2 - Floodway Schematic

The floodways in this report are recommended to local agencies as minimum standards that can be adopted or that can be used as a basis for additional studies.

5.0 INSURANCE APPLICATION

In order to establish actuarial insurance rates, the FIA has developed a process to transform the data from the engineering study into flood insurance criteria. This process includes the determination of reaches, Flood Hazard Factors (FHF), and flood insurance zone designations for each flooding source affecting the Village of Roselle.

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION		
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQ. FEET)	MEAN VELOCITY (FEET/SEC.)	WITH FLOODWAY (NGVD)	WITHOUT FLOODWAY (NGVD)	DIFFERENCE
SPRING BROOK							
A	14,870	70	140	2.40	724.0	723.9	0.1
B	14,990	100	236	1.43	724.8	724.7	0.1
C	15,510	33	136	2.40	729.4	729.3	0.1
D	15,650	30	86	3.57	729.7	729.6	0.1
E	16,210	71	130	1.85	730.9	730.8	0.1
F	17,090	65	107	2.24	734.8	734.7	0.1
G	17,730	22	58	4.14	738.1	738.0	0.1
H	17,880	43	140	1.71	742.1	742.0	0.1
I	18,080	62	258	0.93	742.2	742.1	0.1
J	18,300	40	136	1.76	743.5	743.4	0.1
K	18,500	64	203	1.18	744.6	744.5	0.1
L	18,880	27	91	2.64	745.2	745.1	0.1
M	19,090	63	177	1.36	747.3	747.2	0.1
N	19,530	49	89	2.36	748.5	748.4	0.1
O	20,230	22	46	4.57	753.4	753.3	0.1
P	21,460	14	58	3.62	761.9	761.8	0.1
Q	21,570	24	64	3.13	762.2	762.1	0.1
R	21,895	27	58	3.45	764.4	764.3	0.1
S	22,410	38/30[2]	84	2.38	766.1	766.0	0.1
T	23,575	66	98	2.27	775.1	775.0	0.1
U	24,025	17	53	3.77	776.4	776.3	0.1
V	24,505	240	358	0.56	781.1	781.0	0.1

[1]FEET ABOVE LAKE KADIJAH SPILLWAY
[2]TOTAL WIDTH / WIDTH WITHIN CORPORATE LIMITS

TABLE 2

FEDERAL EMERGENCY MANAGEMENT AGENCY
Federal Insurance Administration

VILLAGE OF ROSELLE, IL

(DU PAGE AND COOK COS.)

FLOODWAY DATA

SPRING BROOK

5.1 Reach Determinations

Reaches are defined as lengths of watercourses having relatively the same flood hazard, based on the average weighted difference in water-surface elevations between the 10- and 100-year floods. This difference does not have a variation greater than that indicated in the following table for more than 20 percent of the reach.

Average Difference Between 10- and 100-year Floods	Variation
Less than 2 feet	0.5 foot
2 to 7 feet	1.0 foot
7.1 to 12 feet	2.0 feet
More than 12 feet	3.0 feet

The locations of the reaches determined for the Village of Roselle are shown on the Flood Profiles (Exhibit 1) and are summarized in the Flood Insurance Zone Data Table (Table 3).

5.2 Flood Hazard Factors

The FHF is used to correlate flood information with insurance rate tables. Correlations between property damage from floods and their FHFs are used to set actuarial insurance premium rate tables based on FHFs from 005 to 200.

The FHF for a reach is the average weighted difference between the 10- and 100-year flood water-surface elevations expressed to the nearest 0.5 foot, and shown as a three-digit code. For example, if the difference between water-surface elevations of the 10- and 100-year floods is 0.7 foot, the FHF is 005; if the difference is 1.4 feet, the FHF is 015; if the difference is 5.0 feet, the FHF is 050. When the difference between the 10- and 100-year water-surface elevations is greater than 19.0 feet, accuracy for the FHF is to the nearest foot.

5.3 Flood Insurance Zones

After the determination of reaches and their respective FHFs, the entire incorporated area of the Village of Roselle was divided into zones, each having a specific flood potential or hazard. Each zone was assigned one of the following flood insurance zone designations:

Zone A: Special Flood Hazard Areas inundated by the 100-year flood, determined by approximate methods; no base flood elevations are shown or FHFs determined.

Zone A2:	Special Flood Hazard Areas inundated by types of 100-year shallow flooding where depths are between 1.0 and 3.0 feet; depths are shown; but no FHFs are determined.
Zone B:	Areas between the Special Flood Hazard Area and the limits of the 500-year flood, including areas of the 500-year flood plain that are protected from the 100-year flood by dike, levee, or other water control structure; or areas subject to certain types of 100-year shallow flooding where depths are less than 1.0 foot; and areas subject to 100-year flooding from sources with drainage areas less than 1 square mile. Zone B is not subdivided.
Zone C:	Areas of minimal flooding.

Table 3, "Flood Insurance Zone Data," summarizes the flood elevation differences, FHFs, flood insurance zones, and base flood elevations for the flooding source studied in detail in the community.

5.4 Flood Insurance Rate Map Description

The Flood Insurance Rate Map for the Village of Roselle is, for insurance purposes, the principal result of the Flood Insurance Study. This map (published separately) contains the official delineation of flood insurance zones and base flood elevation lines. Base flood elevation lines show the locations of the expected whole-foot water-surface elevations of the base (100-year) flood. This map is developed in accordance with the latest flood insurance map preparation guidelines published by the FIA.

6.0 OTHER STUDIES

The Flood Insurance Studies for the Village of Bloomingdale (Reference 8) and the unincorporated areas of Du Page County (Reference 13) are in complete agreement with this Flood Insurance Study. There are no common flooding sources between this report and the published Flood Insurance Studies for the Village of Schaumburg (Reference 14), the Village of Elk Grove Village (Reference 15), and the unincorporated areas of Cook County (Reference 16). Section 205 Reconnaissance Report on Flood Problems at Roselle, Illinois, by the COE, contains information on Spring Brook (Reference 4). The authors of this report studied the flooding problems along Spring Brook and evaluated both structural and non-structural alternatives. Only the nonstructural alternatives were economically justified. These have not as yet been implemented. The discharges and elevations used in this report are very compatible to the data supplied by this Flood Insurance Study.

FLOODING SOURCE	PANEL[1]	ELEVATION DIFFERENCE[2] BETWEEN 1.0% (100-YEAR) FLOOD AND			FLOOD HAZARD FACTOR	ZONE	BASE FLOOD ELEVATION[3] (NGVD)
		10% (10-YEAR)	2% (50-YEAR)	0.2% (500-YEAR)			
SPRING BROOK							
REACH 1	0002	–1.1	–0.3	0.5	010	A2	VARIES–SEE MAP
REACH 2	0002,0004	–1.1	–0.4	0.4	010	A2	VARIES–SEE MAP

[1]FLOOD INSURANCE RATE MAP PANEL
[2]WEIGHTED AVERAGE
[3]ROUNDED TO NEAREST FOOT

TABLE 3

FEDERAL EMERGENCY MANAGEMENT AGENCY
Federal Insurance Administration

VILLAGE OF ROSELLE, IL
(DU PAGE AND COOK COS.)

FLOOD INSURANCE ZONE DATA

SPRING BROOK

A study entitled Central Avenue Detention Basin (Reference 17) was made to study the cost of constructing a floodwater detention basin along Spring Brook north of Central Avenue. The study recommended building a 25-acre-foot reservoir that could be expanded to meet the necessary 115 acre-feet of storage. Two studies, Survey Report for Improvement (Reference 18) and Spring Brook Drainage Study (Reference 19), suggested improvements for Spring Brook in Roselle and Bloomingdale (Reference 16). None of these recommendations were implemented.

A Flood Hazard Boundary Map has been published by the Federal Insurance Administration (Reference 20). The differences between the Flood Hazard Boundary Map and this study are justified due to the more detailed nature of this Flood Insurance Study.

This report either supersedes or is compatible with all previous studies published on streams studied in this report and should be considered authoritative for the purposes of the National Flood Insurance Program.

7.0 LOCATION OF DATA

Survey, hydrologic, hydraulic and other pertinent data used in this study can be obtained by contacting the Insurance and Mitigation Division, Federal Emergency Management Agency, One North Dearborn Street, Chicago, Illinois 60602.

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10. Orthophoto Maps, Scale 1:4800, Contour Interval two feet: Village of Roselle, Illinois, 1977.

11. Orthophoto Maps, Scale 1:1200, Contour Interval two feet: Village of Roselle, Illinois, 1979.

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REACH 1
ZONE A2

LIMIT OF FLOODING AFFECTING COMMUNITY

CORPORATE LIMITS

FOSTER AVENUE

CORPORATE LIMITS

PRIVATE DRIVEWAY

CORPORATE LIMITS

ELEVATION IN FEET (NGVD)

735
730
725
720
715

A
B
C
D
E

LEGEND

500–YEAR FLOOD
100–YEAR FLOOD
50–YEAR FLOOD
10–YEAR FLOOD
STREAM BED
CROSS SECTION LOCATION

14,200 14,400 14,600 14,800 15,000 15,200 15,400 15,600 15,800 16,000 16,200 16,400 16,600

STREAM DISTANCE IN FEET ABOVE LAKE KADIJAH SPILLWAY

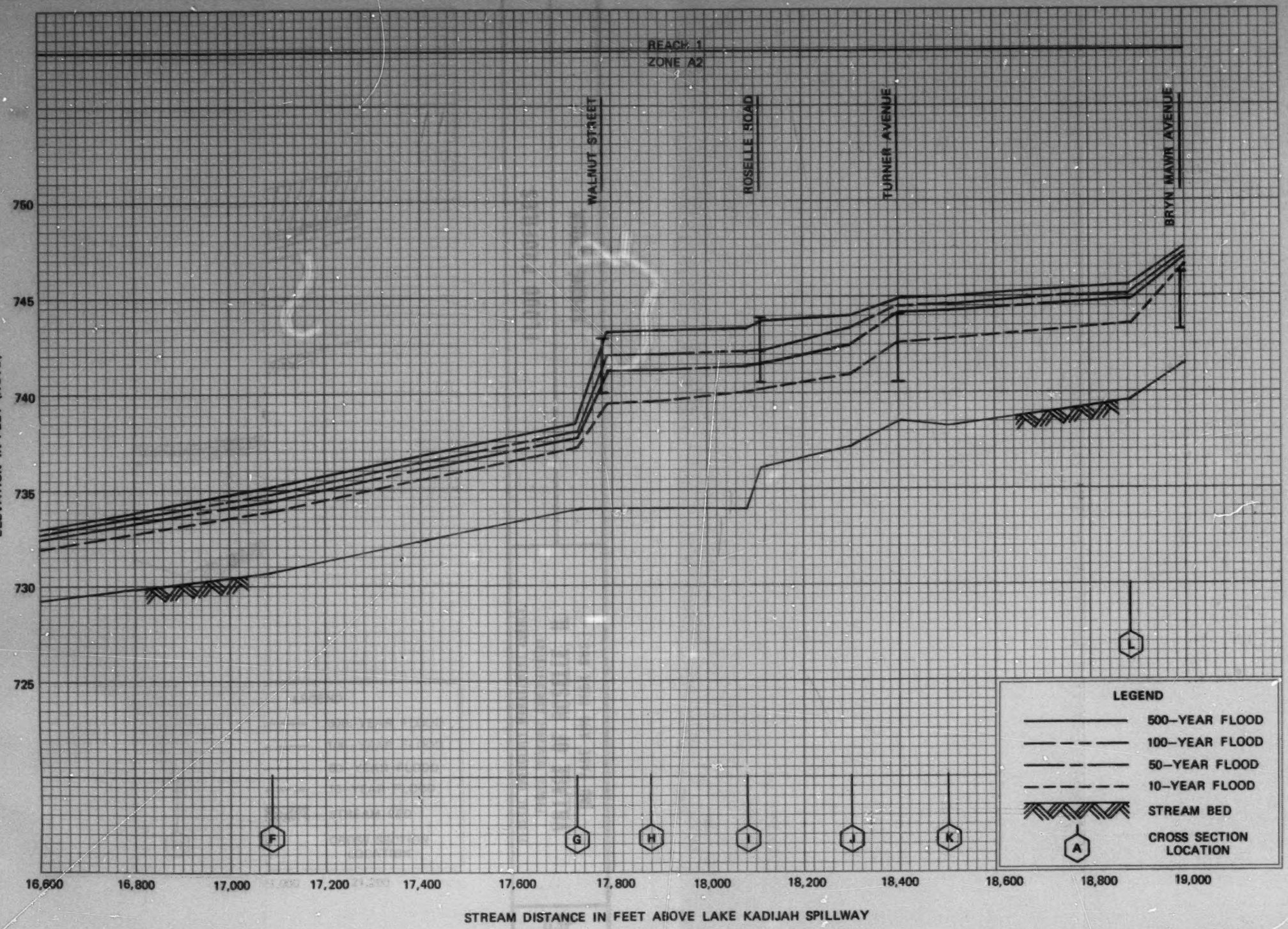
FLOOD PROFILES

SPRING BROOK

FEDERAL EMERGENCY MANAGEMENT AGENCY
Federal Insurance Administration

VILLAGE OF ROSELLE, IL
(DU PAGE AND COOK COS.)

01P



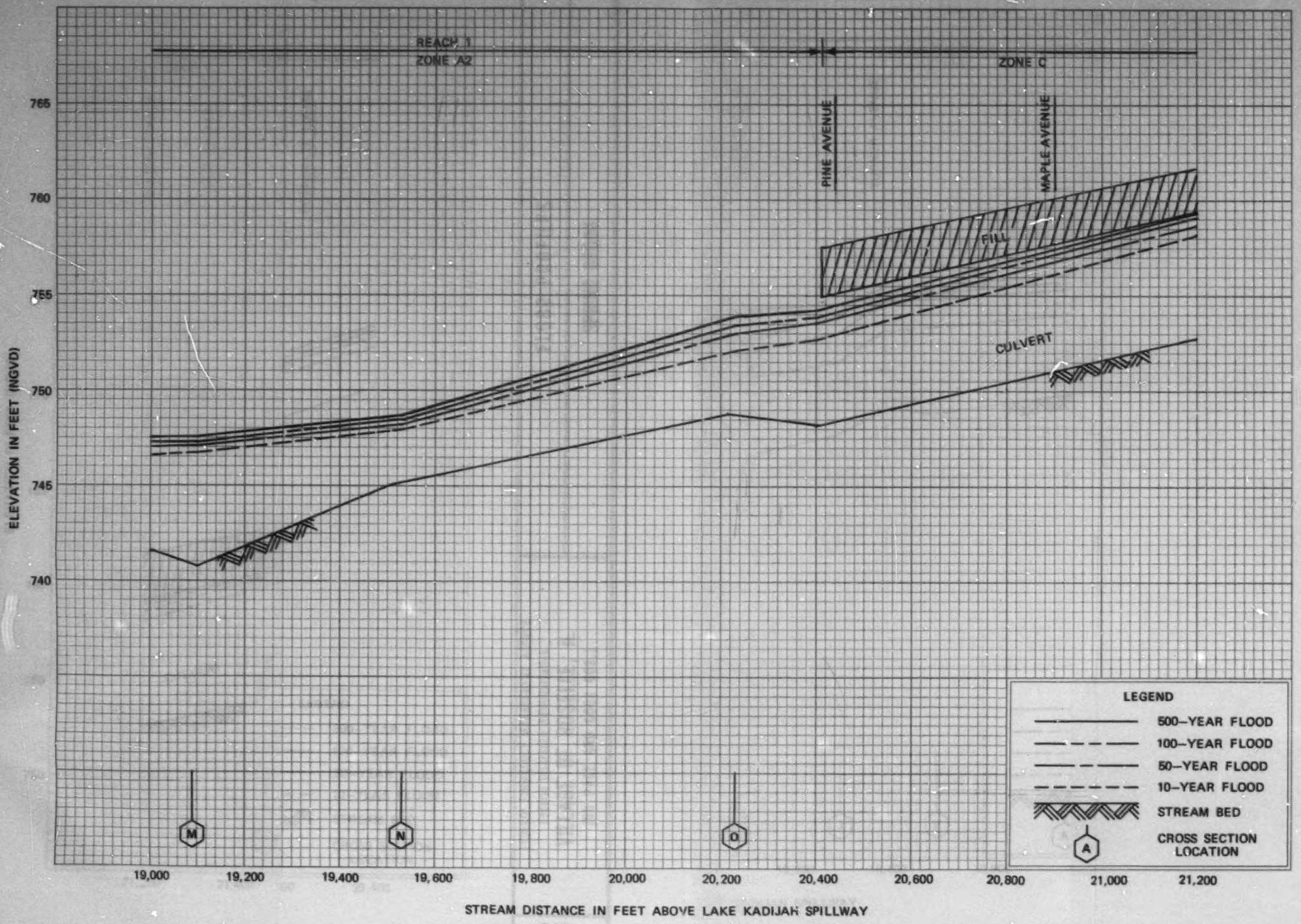
FLOOD PROFILES

SPRING BROOK

FEDERAL EMERGENCY MANAGEMENT AGENCY
Federal Insurance Administration

VILLAGE OF ROSELLE, IL
(DU PAGE AND COOK COS.)

02P



FLOOD PROFILES

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Federal Insurance Administration

VILLAGE OF ROSELLE, IL
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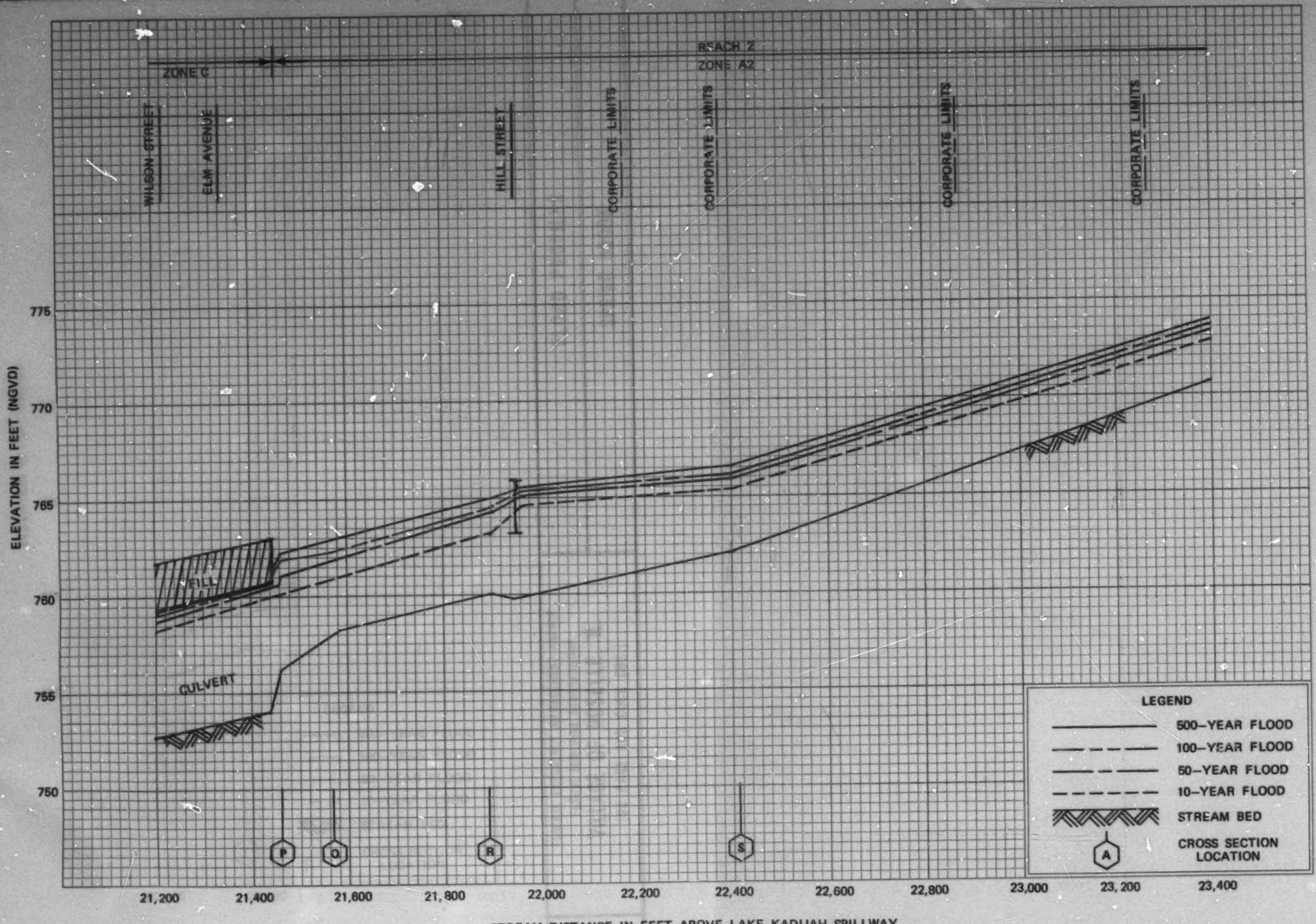
03P



FLOOD PROFILES

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Federal Insurance Administration

VILLAGE OF ROSELLE, IL
(DU PAGE AND COOK COS.)

04P

REACH 2
ZONE A2

CENTRAL AVENUE

LIMIT OF DETAILED STUDY

50-, AND 100-YEAR
COINCIDE IN THIS REACH

ELEVATION IN FEET (NGVD)

785
780
775
770

T
U
V

23,400 23,600 23,800 24,000 24,200 24,400 24,600

STREAM DISTANCE IN FEET ABOVE LAKE KADIJAH SPILLWAY

LEGEND

- 500-YEAR FLOOD
- 100-YEAR FLOOD
- 50-YEAR FLOOD
- 10-YEAR FLOOD
- STREAM BED
- A — CROSS SECTION LOCATION

FLOOD PROFILES

SPRING BROOK

FEDERAL EMERGENCY MANAGEMENT AGENCY
Federal Insurance Administration

VILLAGE OF ROSELLE, IL
(DU PAGE AND COOK COS.)

05P